Billet Description
for
ENVIRONMENTAL ENGINEER CONSULTANT
(CO-05)

MAJOR DUTIES

A. Provides engineering and technical assistance and consultation to as many as 15 or more Federal, state, or tribal engineers/utility operators in the use of guidelines, specifications, equipment and materials associated with monitoring environmental conditions and/or the planning, design, troubleshooting, operation and maintenance, and construction of water, sewer, solid waste and other pollution control facilities for Federal facilities, municipalities, and Indian homes and communities.

B. Prepares or supervises preparation of project document reviews and recommends for acceptance plans for environmental monitoring/investigations, and/or plans for utility operations, and/or project documents including engineering reports, engineering designs, construction plans, specifications and study reports. Responsible for the conformance of these completed works with accepted engineering, public health, and administrative practices.

C. Reviews construction and other engineering drawings, material and equipment submittals, including feasibility reports from other agencies for conformance with accepted engineering, public health, and Area/Region practices, and properly documents any comments. Responsible for completing or coordinating technical reviews with environmental engineers and other agencies involved with the project.

D. Evaluates the operation and maintenance of sanitation and pollution control facilities, and construction practices for the purposes of evaluating and comparing their relative costs and efficiencies to other similar practices.

E. Establishes and maintains liaison with state, federal and local governmental agencies, tribal and native officials and groups, consulting engineers and contractors.

F. Plans and implements operation and maintenance training for utility operators and homeowners, in fluoridation promotion, and in other aspects of environmental health engineering. Provides technical assistance to Federal agencies, states, municipalities and tribes in matters related to environmental health.

I. EDUCATION AND EXPERIENCE

A. Education: B.S. Degree in Civil or Environmental Engineering from an ABET accredited college or university.

B. Experience: Five years of qualifying professional engineering experience are required with a working knowledge in environmental

monitoring, investigation procedures, and/or design and construction of sanitation and pollution control facilities. Ability to perform complex mathematical analyses for pumping equipment and well designs, experience in utility design, operation and maintenance, and the preparation of plans and specifications also are required. Experience in surveying, designing and construction of concrete structures and simple wastewater treatment lagoons is required. A current PE (Professional Engineer license) from any state is required. An M.S. in Civil or Environmental Engineering is desired.

II. ACCOUNTABILITY

A. Positive Contribution to Organizations Mission: Performs a variety of above average, complex, or unusual environmental engineering tasks without close guidance. Provides consultation to other engineers and utility organizations, and assists with the development of standard construction practices and specifications for Area/Regional-wide use. Provides opportunity to use originality and initiative and provide a significant impact on the organization's mission.

B. Consequences of Judgmental Failure: Exercises considerable independent engineering judgment in accomplishing a variety of engineering tasks. Judgment will affect the outcome of environmental investigations and/or construction/performance of complex, unusual, or highly technical sanitation or pollution control facilities. Judgmental failure could seriously affect the health or safety of one or more individuals (e.g., failure of domestic water or sewer systems because of improper advice on system operation). Work is not reviewed in great detail.

III. SUPERVISORY RESPONSIBILITY

A. Number Supervised: Firstline supervisor of up to three technical/clerical employees engaged in office and field engineering activities.

B. Impact of Direction Given: Schedules, assigns, and directs work; exercises administrative control over subordinates to carry out program policies.

IV. PERSONAL RESPONSIBILITY

A. Character of Direction Received: Assignments are received from the supervisor; work is outlined in general terms; priorities and deadlines are determined and extent of authority is established. The assignments are carried out independently in accordance with policies and procedures, i.e., most problems that arise are handled without further consultation; and policy is interpreted in the field. The supervisor is informed regularly of project progress, potential problem areas, and potential controversy or serious implications. Completed work is reviewed from the overall standpoint of meeting

B. Guidelines and Originality: Responsible for interpreting and adapting written guidelines, procedures, and standard engineering and construction practices. Independently provides consultation to other engineers and review of standard engineering practices and procedures. Uses own judgment in interpreting guidelines and actual situations for the purpose of modifications in standard guidelines or procedures, or for creating new ones. Must be technically innovative.

V. PERSONAL WORK CONTACTS

A. Persons Contacted: Principle contacts are with supervisors, other public health professionals, Federal, state, and tribal engineers, utility operators, and officials involved with environmental engineering and construction projects. Limited contacts are made with Area/Regional Contracting, Finance and Management staff.

B. Work Contact Purpose: The purpose of such contacts is for technical discussion and sharing of information on utility operation and maintenance, specific construction projects, or proposed changes in standard practices or guidelines.

CONTINUING EDUCATION:

A. Training: It is highly recommended that formal training/course work be taken in construction contracting/management and mid-level supervision/management.